

COLOUR.—(*In spirits.*) Greenish-brown, much more uniform than in either of the last two species, not deepening on the back, and scarcely becoming paler underneath. The back, sides, and rays of the fins, are finely irrorated with dusky specks, as in the *M. alpinus*, but not to the same extent, the specks being more thinly scattered, and here and there scarcely visible. From the same cause the fins appear paler.

Habitat, Bay of Islands, New Zealand.

This, which is a very distinct species of this new genus, was taken by Mr. Darwin in fresh-water in the Bay of Islands, New Zealand. It is well characterized by its more attenuated head and smaller eye, than those of either of the two others.

#### FAMILY.—ESOCIDÆ.

##### EXOCÆTUS EXILIENS. *Bl.*?

*Exocætus exiliens*, *Bl.* Ichth. pl. 397.

FORM.—Head about one-sixth of the entire length, and approaching to the form of a parallelopiped; very much flattened on the crown and between the eyes quite to the end of the snout, broader above than beneath, so that the cheeks are beyond the vertical inclining inwards at bottom. Snout short: mouth not much cleft; when shut, the jaws are equal, and the commissure of the lips appears to extend to beneath the anterior margin of the eye, but the maxillary, which retires completely beneath the suborbital, does not reach so far: when the mouth is open, the maxillary becomes vertical, and the intermaxillary being scarcely at all protractile, the lower jaw is a little the longest. Teeth very minute: a row, scarcely visible, along the forepart of the intermaxillary, but not extending to the sides of the jaw: none that can even be felt in the lower jaw, or in any other part of the mouth. Tongue rounded, and free at the tip. A loose veil of skin hangs down in front of the palate, from immediately behind the teeth in the upper jaw. Eyes round, and very large; the upper part of the orbit reaching to the line of the profile, and forming a slightly salient ridge: their diameter very nearly one-third the length of the head; between them and the end of the snout is two-thirds of a diameter; the distance from one to the other across the crown is one diameter and a quarter. The nostrils consist of one large round orifice a little in advance of the eyes. The membrane of the opercle forms a slightly salient angle backwards, near the upper part of the gill-opening. Scales large, of a somewhat irregular form, approaching to oblong, nearly twice as broad as long, the posterior margin with three or four incisions near the middle, and a few rather indistinct nearly parallel striæ on the surface of the basal portion; in others these striæ converge to form a small but very regular fan; and the scales appear to vary a good deal on different parts of the body.

The pectorals reach exactly to the base of the lateral caudal rays; the first two rays are simple, and all the others branched; first ray of all not half the length of the fin. Dorsal so situate as to leave a space between it and the end of the fleshy part of the tail about equal to its own length; the first ray simple, the others branched; the last prolonged beyond those which immediately precede it so as to form rather a point backwards. Anal similar to the

dorsal, and answering to it exactly. The ventrals are attached at a point, in this specimen, about half an inch posterior to the middle of the entire length, reckoning this to the end of the fleshy part of the tail; but are not much out of the middle, if the length be reckoned to the end of the upper lobe of the caudal: their length is contained not quite three and a half times in the entire length, excluding caudal; and they reach exactly to the end of the dorsal and anal: first ray very much branched, and only one-third the length of the fin; second ray appearing like two or even three rays at its upper extremity, from the circumstance of the several branches of it being of unequal length; all the other rays branched likewise. Vent a very little in advance of the anal. Upper lobe of the caudal one-third shorter than the lower; this last being exactly the same length as the ventrals.

D. 11; A. 12; C. 16, &c.; P. 18; V. 6.

Length 12 inches 8 lines.

COLOUR.—The colours were not noticed in the recent state; and the specimen is in such bad condition, and so much altered by the spirit, that they are now no longer distinguishable.

The flying-fish above described was taken by Mr. Darwin in the Pacific Ocean, off the coast of Peru, in Lat. 18° S. It appears to be the *E. exiliens* of Bloch, but as I am not aware that the species of *Exocætus* have been ever rigorously worked out, and closely compared from different parts of the globe, I have thought it expedient to annex a description, by which it may be identified, if it prove hereafter distinct.\*

#### FAMILY.—SALMONIDÆ.

##### 1. TETRAGONOPTERUS ABRAMIS. *Jen.*

PLATE XXIII. fig. 1.

*T. corpore subrhomboido, compressissimo, altitudine fere dimidium longitudinis, pinna caudali exclusâ, æquante: osse maxillari angusto, retrorsum arcuato: pinna dorsali triangulari, suprâ ventrales accuratè exorienti; anali lævi, longâ, altitudine retrò cito decrescente; utraq; plicis membranaceis, radiis longitudinaliter adhærentibus, instructâ: squamis in lineâ laterali 46, in lineâ inter pinnas ventrales et dorsalem transversâ 17.*

B. 4; D. 1/10; A. 2/30; C. 19, &c.; P. 13; V. 8.

LONG. unc. 4. lin. 7.

FORM.—Of a subrhomboidal form, the nape and back being much elevated, whence the profile falls very obliquely and in nearly a straight line. Greatest depth nearly half the entire length, excluding caudal. Body very much compressed, the thickness being nearly three and a half times in the depth. Head approaching to a laterally flattened cone, with the length and height nearly equal. Snout very short; mouth but little cleft; when open, the lower jaw projecting

\* Swainson is of opinion that "more than double the number of species of *Exocætus* really exist above those that have been described."—*Nat. Hist. of Fishes*, vol. i. p. 299.